

# Zhong-Hua Liu

## List of Publications by Year in descending order

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132  
papers

3,712  
citations

117625  
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161849  
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docs citations

143  
times ranked

3987  
citing authors

#	ARTICLE	IF	CITATIONS
1	Production of $\alpha$ -1,3-galactosyltransferase null pigs by means of nuclear transfer with fibroblasts bearing loss of heterozygosity mutations. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7335-7340.	7.1	418
2	Androgenetic haploid embryonic stem cells produce live transgenic mice. Nature, 2012, 490, 407-411.	27.8	149
3	Direct reprogramming of Sertoli cells into multipotent neural stem cells by defined factors. Cell Research, 2012, 22, 208-218.	12.0	135
4	Specific gene-regulation networks during the pre-implantation development of the pig embryo as revealed by deep sequencing. BMC Genomics, 2014, 15, 4.	2.8	130
5	Interspecies Implantation and Mitochondria Fate of Panda-Rabbit Cloned Embryos1. Biology of Reproduction, 2002, 67, 637-642.	2.7	125
6	Transgene Expression Is Associated with Copy Number and Cytomegalovirus Promoter Methylation in Transgenic Pigs. PLoS ONE, 2009, 4, e6679.	2.5	91
7	Asymmetric Expression of LincGET Biases Cell Fate in Two-Cell Mouse Embryos. Cell, 2018, 175, 1887-1901.e18.	28.9	91
8	In vitro development of preimplantation porcine nuclear transfer embryos cultured in different media and gas atmospheres. Theriogenology, 2004, 61, 1125-1135.	2.1	88
9	Genetic Modification and Screening in Rat Using Haploid Embryonic Stem Cells. Cell Stem Cell, 2014, 14, 404-414.	11.1	85
10	Piglets cloned from induced pluripotent stem cells. Cell Research, 2013, 23, 162-166.	12.0	84
11	Chitosan capped pH-responsive hollow mesoporous silica nanoparticles for targeted chemo-photo combination therapy. Carbohydrate Polymers, 2020, 231, 115706.	10.2	83
12	Maternal factors required for oocyte developmental competence in mice: Transcriptome analysis of non-surrounded nucleolus (NSN) and surrounded nucleolus (SN) oocytes. Cell Cycle, 2013, 12, 1928-1938.	2.6	70
13	Production of endothelial nitric oxide synthase (eNOS) over-expressing piglets. Transgenic Research, 2006, 15, 739-750.	2.4	57
14	Expression of GDF-9, BMP-15 and their receptors in mammalian ovary follicles. Journal of Molecular Histology, 2010, 41, 325-332.	2.2	57
15	Histone H3 lysine 27 trimethylation acts as an epigenetic barrier in porcine nuclear reprogramming. Reproduction, 2016, 151, 9-16.	2.6	56
16	Sox2 is the faithful marker for pluripotency in pig: Evidence from embryonic studies. Developmental Dynamics, 2015, 244, 619-627.	1.8	55
17	A novel long intergenic noncoding <sc>RNA</sc> indispensable for the cleavage of mouse two-cell embryos. EMBO Reports, 2016, 17, 1452-1470.	4.5	55
18	The effects of DNA double-strand breaks on mouse oocyte meiotic maturation. Cell Cycle, 2013, 12, 1233-1241.	2.6	53

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19	Generation of clinical-grade human induced pluripotent stem cells in Xeno-free conditions. <i>Stem Cell Research and Therapy</i> , 2015, 6, 223.	5.5	49
20	CDX2 is essential for cell proliferation and polarity in porcine blastocysts. <i>Development (Cambridge)</i> , 2017, 144, 1296-1306.	2.5	48
21	Generation and characterization of stable pig pregastrulation epiblast stem cell lines. <i>Cell Research</i> , 2022, 32, 383-400.	12.0	48
22	Mice Cloned from Induced Pluripotent Stem Cells (iPSCs)1. <i>Biology of Reproduction</i> , 2010, 83, 238-243.	2.7	46
23	Generation and Application of Mouse-Rat Allodiploid Embryonic Stem Cells. <i>Cell</i> , 2016, 164, 279-292.	28.9	46
24	Lineage specification and pluripotency revealed by transcriptome analysis from oocyte to blastocyst in pig. <i>FASEB Journal</i> , 2020, 34, 691-705.	0.5	46
25	Aberrant DNA methylation in porcine in vitro-, parthenogenetic-, and somatic cell nuclear transfer-produced blastocysts. <i>Molecular Reproduction and Development</i> , 2008, 75, 250-264.	2.0	45
26	Comparison of developmental capacity for intra- and interspecies cloned cat ( <i>Felis catus</i> ) embryos. <i>Molecular Reproduction and Development</i> , 2003, 66, 38-45.	2.0	44
27	Chitosan based pH-responsive polymeric prodrug vector for enhanced tumor targeted co-delivery of doxorubicin and siRNA. <i>Carbohydrate Polymers</i> , 2020, 250, 116781.	10.2	44
28	Histone variant H3.3-mediated chromatin remodeling is essential for paternal genome activation in mouse preimplantation embryos. <i>Journal of Biological Chemistry</i> , 2018, 293, 3829-3838.	3.4	42
29	Porcine Pluripotent Stem Cells Derived from IVF Embryos Contribute to Chimeric Development In Vivo. <i>PLoS ONE</i> , 2016, 11, e0151737.	2.5	42
30	Epigenetic Reprogramming During Somatic Cell Nuclear Transfer: Recent Progress and Future Directions. <i>Frontiers in Genetics</i> , 2020, 11, 205.	2.3	40
31	Generation of Induced Pluripotent Stem Cells with High Efficiency from Human Umbilical Cord Blood Mononuclear Cells. <i>Genomics, Proteomics and Bioinformatics</i> , 2013, 11, 304-311.	6.9	39
32	Generation of dopaminergic neurons directly from mouse fibroblasts and fibroblast-derived neural progenitors. <i>Cell Research</i> , 2012, 22, 769-772.	12.0	38
33	Unfaithful Maintenance of Methylation Imprints Due to Loss of Maternal Nuclear Dnmt1 during Somatic Cell Nuclear Transfer. <i>PLoS ONE</i> , 2011, 6, e20154.	2.5	37
34	Effects of pregnant mare serum gonadotropin (eCG) on follicle development and granulosa-cell apoptosis in the pig. <i>Theriogenology</i> , 2003, 59, 775-785.	2.1	36
35	The complete mitochondrial genome of sable, <i>Martes zibellina</i> . <i>Mitochondrial DNA</i> , 2012, 23, 167-169.	0.6	34
36	Rapid conversion of human ESCs into mouse ESC-like pluripotent state by optimizing culture conditions. <i>Protein and Cell</i> , 2012, 3, 71-79.	11.0	33

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37	Epigenetic Modification Agents Improve Gene-Specific Methylation Reprogramming in Porcine Cloned Embryos. PLoS ONE, 2015, 10, e0129803.	2.5	29
38	Developmental competence of porcine parthenogenetic embryos relative to embryonic chromosomal abnormalities. Molecular Reproduction and Development, 2006, 73, 77-82.	2.0	28
39	Correlation of Developmental Differences of Nuclear Transfer Embryos Cells to the Methylation Profiles of Nuclear Transfer Donor Cells in Swine. Epigenetics, 2007, 2, 179-186.	2.7	27
40	Rosa26 Locus Supports Tissue-Specific Promoter Driving Transgene Expression Specifically in Pig. PLoS ONE, 2014, 9, e107945.	2.5	27
41	The nuclear mitotic apparatus (NuMA) protein is contributed by the donor cell nucleus in cloned porcine embryos. Frontiers in Bioscience - Landmark, 2006, 11, 1945.	3.0	26
42	Tbx3 and Nr5f2 Play Important Roles in Pig Pluripotent Stem Cells. Stem Cell Reviews and Reports, 2013, 9, 700-708.	5.6	26
43	Telomere Reprogramming and Maintenance in Porcine iPS Cells. PLoS ONE, 2013, 8, e74202.	2.5	26
44	Identification and functional analysis of long intergenic noncoding RNA genes in porcine pre-implantation embryonic development. Scientific Reports, 2016, 6, 38333.	3.3	24
45	Dnmt1s in donor cells is a barrier to SCNT-mediated DNA methylation reprogramming in pigs. Oncotarget, 2017, 8, 34980-34991.	1.8	24
46	rRNA Genes Are Not Fully Activated in Mouse Somatic Cell Nuclear Transfer Embryos. Journal of Biological Chemistry, 2012, 287, 19949-19960.	3.4	23
47	Identification and Characterization of an Oocyte Factor Required for Porcine Nuclear Reprogramming. Journal of Biological Chemistry, 2014, 289, 6960-6968.	3.4	22
48	Efficient generation of mouse ESCs-like pig induced pluripotent stem cells. Protein and Cell, 2014, 5, 338-342.	11.0	22
49	Green fluorescent protein (GFP) transgenic pig produced by somatic cell nuclear transfer. Science Bulletin, 2008, 53, 1035-1039.	9.0	21
50	Generation of neural progenitors from induced Bama miniature pig pluripotent cells. Reproduction, 2014, 147, 65-72.	2.6	21
51	Short-term Preservation of Porcine Oocytes in Ambient Temperature: Novel Approaches. PLoS ONE, 2010, 5, e14242.	2.5	20
52	A Novel Role for DNA Methyltransferase 1 in Regulating Oocyte Cytoplasmic Maturation in Pigs. PLoS ONE, 2015, 10, e0127512.	2.5	20
53	Improvement in the in vitro development of cloned pig embryos after kdm4a overexpression and an H3K9me3 methyltransferase inhibitor treatment. Theriogenology, 2020, 146, 162-170.	2.1	20
54	Fragmentation and development of preimplantation porcine embryos derived by parthenogenetic activation and nuclear transfer. Molecular Reproduction and Development, 2005, 71, 159-165.	2.0	19

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55	Overexpression Nanog Activates Pluripotent Genes in Porcine Fetal Fibroblasts and Nuclear Transfer Embryos. <i>Anatomical Record</i> , 2011, 294, 1809-1817.	1.4	19
56	Histone demethylase complexes KDM3A and KDM3B cooperate with OCT4/SOX2 to define a pluripotency gene regulatory network. <i>FASEB Journal</i> , 2021, 35, e21664.	0.5	19
57	Effect of Astragalus polysaccharide addition to thawed boar sperm on in vitro fertilization and embryo development. <i>Theriogenology</i> , 2018, 121, 21-26.	2.1	18
58	Effect of trichostatin A and 5-Aza-2'-deoxycytidine on transgene reactivation and epigenetic modification in transgenic pig fibroblast cells. <i>Molecular and Cellular Biochemistry</i> , 2011, 355, 157-165.	3.1	16
59	Mitochondrial DNA heteroplasmy in calves cloned by using adult somatic cell. <i>Molecular Reproduction and Development</i> , 2004, 67, 207-214.	2.0	15
60	Telomere Elongation Facilitated by Trichostatin A in Cloned Embryos and Pigs by Somatic Cell Nuclear Transfer. <i>Stem Cell Reviews and Reports</i> , 2014, 10, 399-407.	5.6	15
61	Epigenetic Modification of Cloned Embryos Improves Nanog Reprogramming in Pigs. <i>Cellular Reprogramming</i> , 2015, 17, 191-198.	0.9	15
62	The expression patterns of DNA methylation reprogramming related genes are associated with the developmental competence of cloned embryos after zygotic genome activation in pigs. <i>Gene Expression Patterns</i> , 2015, 18, 1-7.	0.8	15
63	Carboxymethyl chitosan based redox-responsive micelle for near-infrared fluorescence image-guided photo-chemotherapy of liver cancer. <i>Carbohydrate Polymers</i> , 2021, 253, 117284.	10.2	15
64	Retinoic Acid Signaling Regulates Sonic Hedgehog and Bone Morphogenetic Protein Signalings During Genital Tubercle Development. <i>Birth Defects Research Part B: Developmental and Reproductive Toxicology</i> , 2012, 95, 79-88.	1.4	14
65	Endothelial Cells Regulate Cardiac Myocyte Reorganisation Through $\beta$ 1-Integrin Signalling. <i>Cellular Physiology and Biochemistry</i> , 2015, 35, 1808-1820.	1.6	14
66	Characterization of porcine extraembryonic endoderm cells. <i>Cell Proliferation</i> , 2019, 52, e12591.	5.3	14
67	Aggregation of pre-implantation embryos improves establishment of parthenogenetic stem cells and expression of imprinted genes. <i>Development Growth and Differentiation</i> , 2012, 54, 481-488.	1.5	13
68	Cyclin O Regulates Germinal Vesicle Breakdown in Mouse Oocytes1. <i>Biology of Reproduction</i> , 2013, 88, 110.	2.7	13
69	Cdx2 represses Oct4 function via inducing its proteasome-dependent degradation in early porcine embryos. <i>Developmental Biology</i> , 2016, 410, 36-44.	2.0	13
70	Integrated High Throughput Analysis Identifies GSK3 as a Crucial Determinant of p53-Mediated Apoptosis in Lung Cancer Cells. <i>Cellular Physiology and Biochemistry</i> , 2017, 42, 1177-1191.	1.6	13
71	Morphological changes and germ layer formation in the porcine embryos from days 7-13 of development. <i>Zygote</i> , 2015, 23, 266-276.	1.1	12
72	Argonaute 2 is a key regulator of maternal mRNA degradation in mouse early embryos. <i>Cell Death Discovery</i> , 2020, 6, 133.	4.7	12

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73	Trichostatin A Rescues the Disrupted Imprinting Induced by Somatic Cell Nuclear Transfer in Pigs. PLoS ONE, 2015, 10, e0126607.	2.5	12
74	Tannin Supplementation Improves Oocyte Cytoplasmic Maturation and Subsequent Embryo Development in Pigs. Antioxidants, 2021, 10, 1594.	5.1	12
75	Effect of chilling on porcine germinal vesicle stage oocytes at the subcellular level. Cryobiology, 2009, 59, 54-58.	0.7	11
76	Cytochalasin B treatment of mouse oocytes during intracytoplasmic sperm injection (ICSI) increases embryo survival without impairment of development. Zygote, 2012, 20, 361-369.	1.1	11
77	Derivation of Putative Porcine Embryonic Germ Cells and Analysis of Their Multi-Lineage Differentiation Potential. Journal of Genetics and Genomics, 2013, 40, 453-464.	3.9	11
78	DNA repair and replication links to pluripotency and differentiation capacity of pig iPS cells. PLoS ONE, 2017, 12, e0173047.	2.5	11
79	The length of guide RNA and target DNA heteroduplex effects on CRISPR/Cas9 mediated genome editing efficiency in porcine cells. Journal of Veterinary Science, 2019, 20, e23.	1.3	11
80	Generation and Developmental Characteristics of Porcine Tetraploid Embryos and Tetraploid/diploid Chimeric Embryos. Genomics, Proteomics and Bioinformatics, 2013, 11, 327-333.	6.9	10
81	Identification and characterization of an oocyte factor required for sperm decondensation in pig. Reproduction, 2014, 148, 367-375.	2.6	10
82	Disbalance of calcium regulation-related genes in broiler hearts induced by selenium deficiency. Avian Pathology, 2017, 46, 265-271.	2.0	10
83	Identification and characterization of L1-specific endo-siRNAs essential for early embryonic development in pig. Oncotarget, 2017, 8, 23167-23176.	1.8	10
84	Derivation of endothelial cells from porcine induced pluripotent stem cells by optimized single layer culture system. Journal of Veterinary Science, 2020, 21, e9.	1.3	10
85	Derivation of Germline Competent Rat Embryonic Stem Cells from DA Rats. Journal of Genetics and Genomics, 2012, 39, 603-606.	3.9	9
86	bFGF signaling-mediated reprogramming of porcine primordial germ cells. Cell and Tissue Research, 2016, 364, 429-441.	2.9	9
87	A novel chemically defined serum- and feeder-free medium for undifferentiated growth of porcine pluripotent stem cells. Journal of Cellular Physiology, 2019, 234, 15380-15394.	4.1	9
88	IRF-1 expressed in the inner cell mass of the porcine early blastocyst enhances the pluripotency of induced pluripotent stem cells. Stem Cell Research and Therapy, 2020, 11, 505.	5.5	9
89	Positive Correlation Between the Efficiency of Induced Pluripotent Stem Cells and the Development Rate of Nuclear Transfer Embryos When the Same Porcine Embryonic Fibroblast Lines Are Used As Donor Cells. Cellular Reprogramming, 2014, 16, 206-214.	0.9	8
90	Continuous Passages Accelerate the Reprogramming of Mouse Induced Pluripotent Stem Cells. Cellular Reprogramming, 2014, 16, 77-83.	0.9	8

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91	Tbx3 and Nr5f2 improve the viability of porcine induced pluripotent stem cells after dissociation into single cells by inhibiting RHO-ROCK-MLC signaling. Biochemical and Biophysical Research Communications, 2015, 456, 743-749.	2.1	8
92	Generation of cell-type-specific gene mutations by expressing the sgRNA of the CRISPR system from the RNA polymerase II promoters. Protein and Cell, 2015, 6, 689-692.	11.0	8
93	Derivation of porcine extraembryonic endoderm-like cells from blastocysts. Cell Proliferation, 2020, 53, e12782.	5.3	8
94	Metabolomic differences of seminal plasma between boars with high and low average conception rates after artificial insemination. Reproduction in Domestic Animals, 2021, 56, 161-171.	1.4	8
95	Somatic cell bovine cloning: Effect of donor cell and recipients. Science Bulletin, 2003, 48, 549.	1.7	7
96	Generation of Tripotent Neural Progenitor Cells from Rat Embryonic Stem Cells. Journal of Genetics and Genomics, 2012, 39, 643-651.	3.9	7
97	Assessment of reproduction and growth performance of offspring derived from somatic cell cloned pigs. Animal Science Journal, 2012, 83, 639-643.	1.4	7
98	Overexpression of Stella improves the efficiency of nuclear transfer reprogramming. Journal of Genetics and Genomics, 2017, 44, 363-366.	3.9	7
99	Metabolomic Analysis and Identification of Sperm Freezability-Related Metabolites in Boar Seminal Plasma. Animals, 2021, 11, 1939.	2.3	7
100	Ovulation Statuses of Surrogate Gilts Are Associated with the Efficiency of Excellent Pig Cloning. PLoS ONE, 2015, 10, e0142549.	2.5	6
101	RE1-silencing Transcription Factor (REST) Is Required for Nuclear Reprogramming by Inhibiting Transforming Growth Factor $\beta^2$ Signaling Pathway. Journal of Biological Chemistry, 2016, 291, 27334-27342.	3.4	6
102	In vitro and in vivo study on angiogenesis of porcine induced pluripotent stem cell-derived endothelial cells. Differentiation, 2021, 120, 10-18.	1.9	6
103	Melatonin Regulates Lipid Metabolism in Porcine Cumulus-Oocyte Complexes via the Melatonin Receptor 2. Antioxidants, 2022, 11, 687.	5.1	6
104	A pre-breeding screening program for transgenic boars based on fluorescence in situ hybridization assay. Transgenic Research, 2014, 23, 679-689.	2.4	5
105	Asynchronous CDX2 expression and polarization of porcine trophoblast cells reflects a species-specific trophoderm lineage determination progress model. Molecular Reproduction and Development, 2018, 85, 590-598.	2.0	5
106	Evaluation of porcine circovirus type 2 infection in in vitro embryo production using naturally infected oocytes. Theriogenology, 2019, 126, 75-80.	2.1	5
107	Wnt signaling associated small molecules improve the viability of pPSCs in a PI3K/Akt pathway dependent way. Journal of Cellular Physiology, 2020, 235, 5811-5822.	4.1	5
108	Cell therapy in diabetes: current progress and future prospects. Science Bulletin, 2015, 60, 1744-1751.	9.0	4

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109	Co-participation of paternal and maternal genomes before the blastocyst stage is not required for full-term development of mouse embryos: Figure 1. <i>Journal of Molecular Cell Biology</i> , 2015, 7, 486-488.	3.3	4
110	A novel swine model for evaluation of dyslipidemia and atherosclerosis induced by human CETP overexpression. <i>Lipids in Health and Disease</i> , 2017, 16, 169.	3.0	4
111	Fetal bovine serum promotes the development of in vitro porcine blastocysts by activating the Rho-associated kinase signalling pathway. <i>Reproduction, Fertility and Development</i> , 2019, 31, 366.	0.4	4
112	Cellular reprogramming by single-cell fusion with mouse embryonic stem cells in pig. <i>Journal of Cellular Physiology</i> , 2020, 235, 3558-3568.	4.1	4
113	Stem cells and small molecule screening: haploid embryonic stem cells as a new tool. <i>Acta Pharmacologica Sinica</i> , 2013, 34, 725-731.	6.1	3
114	Identification and characterization of a novel porcine endothelial cell-specific promoter. <i>Xenotransplantation</i> , 2013, 20, 438-448.	2.8	3
115	Transcriptomic analysis of porcine PBMCs in response to <i>Actinobacillus pleuropneumoniae</i> reveals the dynamic changes of differentially expressed genes related to immuno-inflammatory responses. <i>Antonie Van Leeuwenhoek</i> , 2018, 111, 2371-2384.	1.7	3
116	Endo-siRNAs repress expression of SINE1B during in vitro maturation of porcine oocyte. <i>Theriogenology</i> , 2019, 135, 19-24.	2.1	3
117	Pig-specific RNA editing during early embryo development revealed by genome-wide comparisons. <i>FEBS Open Bio</i> , 2020, 10, 1389-1402.	2.3	3
118	The Role of Extracellular Ca <sup>2+</sup> and Formation and Duration of Pores on the Oolemma in the Electrical Activation of Mouse Oocytes. <i>Journal of Reproduction and Development</i> , 1997, 43, 289-293.	1.4	3
119	Imprinting disorder in donor cells is detrimental to the development of cloned embryos in pigs. <i>Oncotarget</i> , 2017, 8, 72363-72374.	1.8	3
120	Evaluation of porcine urine-derived cells as nuclei donor for somatic cell nuclear transfer. <i>Journal of Veterinary Science</i> , 2022, 23, e40.	1.3	3
121	Porcine Pluripotent Stem Cells Established from LCDM Medium with Characteristics Differ from Human and Mouse Extended Pluripotent Stem Cells. <i>Stem Cells</i> , 2022, 40, 751-762.	3.2	3
122	Derivation and Characterization of Endothelial Cells from Porcine Induced Pluripotent Stem Cells. <i>International Journal of Molecular Sciences</i> , 2022, 23, 7029.	4.1	3
123	Derivation of androgenetic embryonic stem cells from m-carboxycinnamic acid bishydroxamide (CBHA) treated androgenetic embryos. <i>Science Bulletin</i> , 2013, 58, 2862-2868.	1.7	2
124	Endo-siRNAs regulate early embryonic development by inhibiting transcription of long terminal repeat sequence in pig. <i>Biology of Reproduction</i> , 2019, 100, 1431-1439.	2.7	2
125	Electrofusion of 2-Cell Embryos for Porcine Tetraploid Embryo Production. <i>Methods in Molecular Biology</i> , 2019, 1874, 361-371.	0.9	2
126	RNAi-mediated knockdown of <i>Parp1</i> does not improve the development of female cloned mouse embryos. <i>Oncotarget</i> , 2017, 8, 69863-69873.	1.8	2



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127	Efficient Derivation of Human Induced Pluripotent Stem Cells with a c-Myc-Free Non-Integrating Episomal Vector. Journal of Genetics and Genomics, 2016, 43, 161-164.	3.9	1
128	Interspecies cell fusion between mouse embryonic stem cell and porcine pluripotent cell. Reproduction in Domestic Animals, 2021, 56, 1095-1103.	1.4	1
129	Delayed Implantation Induced by Letrozole in Mice. Reproductive Sciences, 2022, 29, 2864-2875.	2.5	1
130	Effects of different nuclear recipients on developmental potential of mouse somatic nuclear transfer embryos. Science Bulletin, 2003, 48, 469-471.	1.7	0
131	Effects of different nuclear recipients on developmental potential of mouse somatic nuclear transfer embryos. Science Bulletin, 2003, 48, 469.	1.7	0
132	Transgene Copy Number and Integration Site Analysis in Transgenic Pig*. Progress in Biochemistry and Biophysics, 2010, 2009, 1617-1625.	0.3	0